

REMARKS

Figs. 3 and 15 has been amended to correct inadvertent errors.

Claims 13-25, 27, 29, 32 and 35 stand rejected under 35 U.S.C. §112, second paragraph, as being indefinite. Independent claims 13, 27, 29, 32 and 35 have been amended in a readily apparent manner to overcome this rejection. Withdrawal of the rejection is respectfully requested.

Claims 13-23, 26-30, 32-33 and 35-36 stand rejected under § 102 on the basis of Bouvier et al. Applicants respectfully traverse this rejection because the cited reference does not disclose or suggest features for recognizing the prohibition of use of a failed device, as in the present invention.

The Bouvier et al. reference relates to a dual processor computer system including two processing units 202 and 204 which are both reset when initially powered on. This causes the processing unit 202 to assume a master operation and the processing unit 204 to assume operation as a slave (see col. 5, line 66-col. 6, line 8). A failure may occur when the processing unit 202 fails to reset or fails to execute any code (col. 6, lines 29-31). If the processing unit 202 fails, the timer control bit 280 will not be set. This causes a timer unit 252 to issue a time-out signal which is received by a control unit 250. The control unit then disables the processing unit 202 by holding the processing unit in a reset state (see col. 7, lines 39-44). Thus, the Bouvier et al. reference teaches that the control unit is notified of the failure in the processing unit 202 when a time-out signal is received from the timer unit. In

this manner, the control unit is already aware, or has recognized, that the processing unit 202 has suffered a failure by the time the time-signal is received.

In the present invention, the device control unit recognizes the prohibition of the use of the failed device when the control unit attempts and is unable to access the failed device. The Bouvier et al. reference discloses (upon learning from receipt of a time-signal from the timer unit 252) that the already failed processing unit is disabled by the control unit by holding the processing unit in a reset state, or by continuously asserting an arbitration back-off signal to the processing unit, or causing the processing unit 202 to execute in closed loop whereby it continuously executes code out of its own internal cash (see col. 7, lines 39-49). Thus, Bouvier et al. teaches that the control unit sends out a signal for disabling the processing unit 202 (since the control unit already knows that the processing unit has failed), whether or not the processing unit is responsive to the control unit. Therefore, the reference does not recognize, nor is it concerned with, the prohibition of the use of the failed device based on an attempt to access the failed device. When the control unit sends a signal to the processing unit 202 upon a notification of a failure by the timer unit, its purpose is to disable the processing unit, not to recognize whether the use of the failed device is prohibited. For these reasons, the rejected claims are allowable over Bouvier et al.

Claims 26, 28, 30, 33 and 36 stand rejected under § 102 on the basis of Carlson et al. Applicants respectfully traverse this rejection because the cited reference does not disclose or suggest features for changing the state of the failed device in one system to a state

where another system related to the failed device can recognize a prohibition of use of the failed device.

The Carlson et al. reference discloses at least two computer systems, each including an IOP manager. One of the IOP managers is designated to be the primary and the IOP manager in the other system the secondary IOP manager. The two computers systems share common IOPs. When a problem is detected in one of the shared devices, the primary IOP manager “sends the status information to the secondary IOP manger” in the other computer system (see col. 3, lines 20-37, and col. 9, lines 39-41).

In contrast, the present invention changes the state of the failed device in one system to a state where another system related to the failed device can recognize a prohibition of the use of the failed device. In other words, the present invention does not send the status information in one system to another system, as in the Carlson reference. Rather, the notification device in one system merely changes the state of the failed device itself within the same system. This is different from sending status information from the local IOP manager of one system to another IOP manager in a separate system. For this reason, claims 26, 28, 30, 33 and 36 are allowable over Carlson et al.

Claims 24 and 25 stand rejected under §103(a) as being unpatentable over Bouvier in view of Fuss et al. Applicants respectfully traverse this rejection for the reasons given with respect to claim 13, from which these claims depend, and because of the additional features recited in these claims.

For the foregoing reasons, applicants believe that this case is in condition for allowance, which is respectfully requested. The examiner should call applicants' attorney if an interview would expedite prosecution.

Respectfully submitted,

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In the Drawings:

The attached sheets of drawings include changes to Figs. 3 and 15.

Attachments: (2) Replacement Sheets
(2) Annotated sheets showing changes

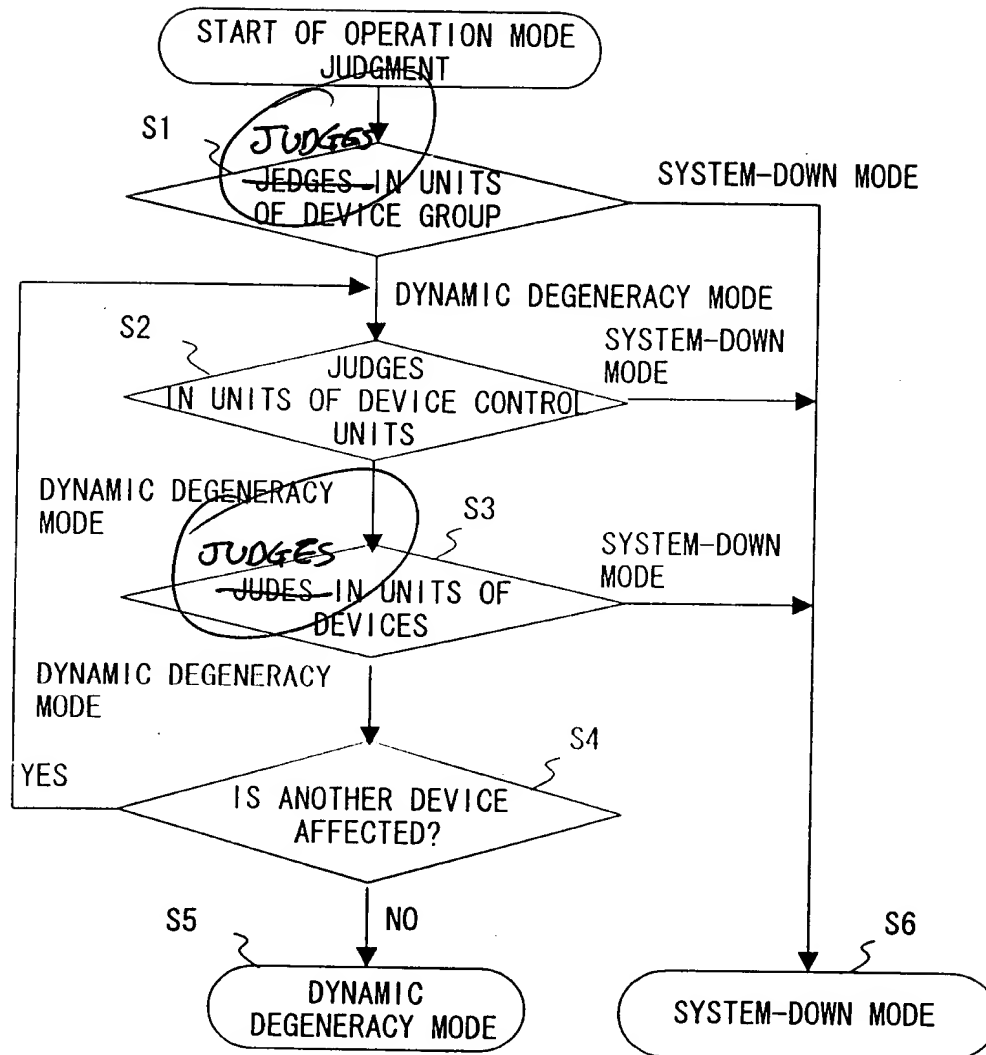


FIG. 3

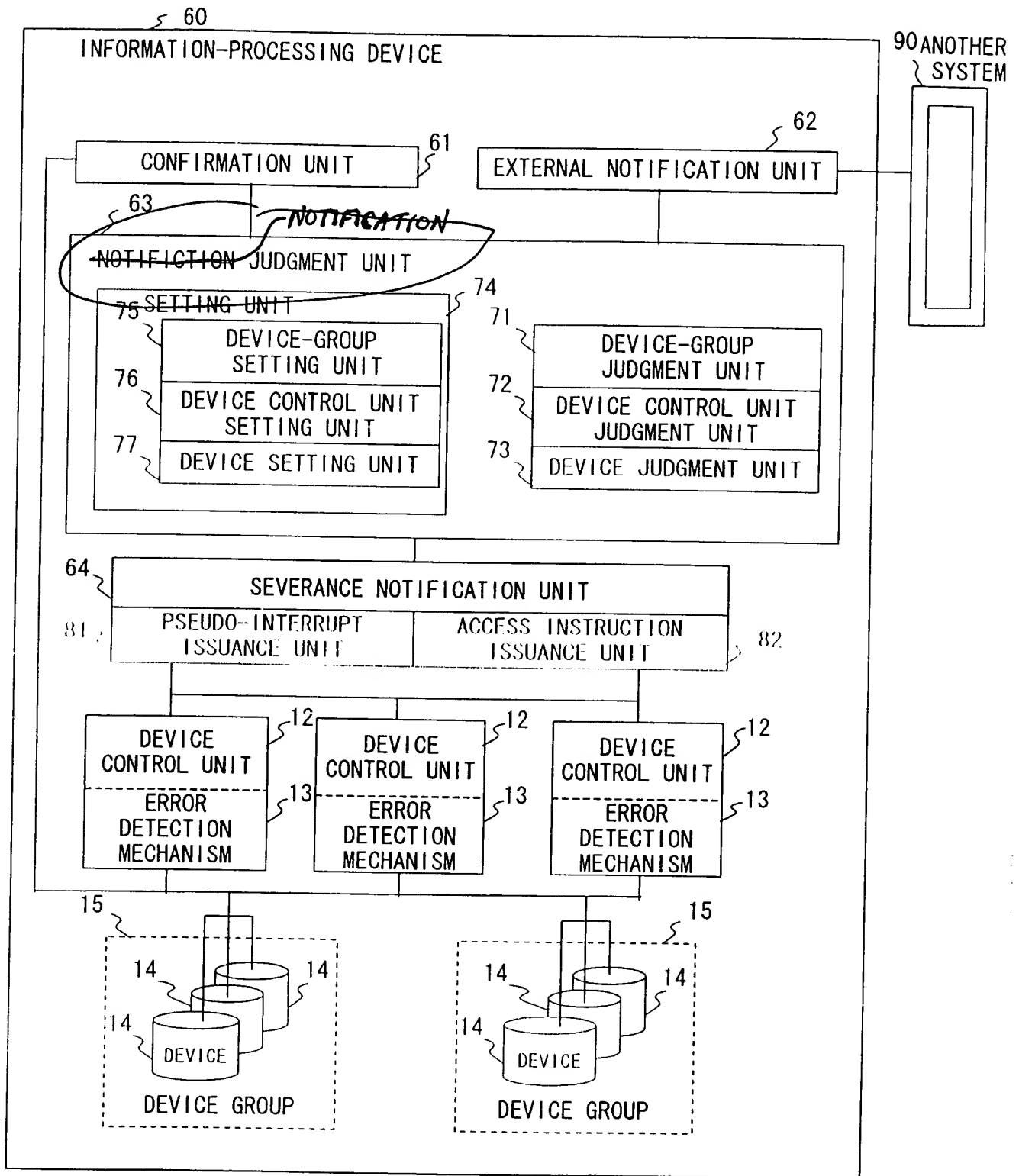
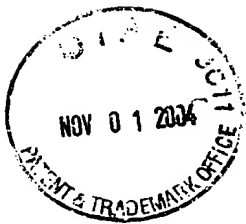


FIG. 15